

Sequence Listing

<110> Genentech, Inc.  
Ashkenazi, Avi J.  
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Tumas, Daniel  
Wood, William I.

<120> COMPOUNDS, COMPOSITIONS AND METHODS FOR THE TREATMENT  
OF DISEASES CHARACTERIZED BY A33- RELATED ANTIGENS

<130> P1216R1PCT

<140> US 09/254,465  
<141> 1999-03-05

<150> PCT/US98/24855  
<151> 1998-11-20

<150> US 60/066,364  
<151> 1997-11-21

<150> US 60/078,936  
<151> 1998-03-20

<150> PCT/US98/19437  
<151> 1998-09-17

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Val His Ser Ser Glu Pro Glu Val Arg Ile Pro Glu Asn Asn Pro  
35 40 45  
Val Lys Leu Ser Cys Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val  
50 55 60  
Glu Trp Lys Phe Asp Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr  
65 70 75  
Asn Asn Lys Ile Thr Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu  
80 85 90  
Pro Thr Gly Ile Thr Phe Lys Ser Val Thr Arg Glu Asp Thr Gly  
95 100 105  
Thr Tyr Thr Cys Met Val Ser Glu Glu Gly Gly Asn Ser Tyr Gly  
110 115 120

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Thr	Val	Asn	Ile	Pro	Ser	Ser	Ala	Thr	Ile	Gly	Asn	Arg	Ala	Val
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Leu	Thr	Cys	Ser	Glu	Gln	Asp	Gly	Ser	Pro	Pro	Ser	Glu	Tyr	Thr
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Trp	Phe	Lys	Asp	Gly	Ile	Val	Met	Pro	Thr	Asn	Pro	Lys	Ser	Thr
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Glu	Leu	Val	Phe	Asp	Pro	Leu	Ser	Ala	Ser	Asp	Thr	Gly	Glu	Tyr
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Ser	Cys	Glu	Ala	Arg	Asn	Gly	Tyr	Gly	Thr	Pro	Met	Thr	Ser	Asn
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Ala	Val	Arg	Met	Glu	Ala	Val	Glu	Arg	Asn	Val	Gly	Val	Ile	Val
230													235	240
Ala	Ala	Val	Leu	Val	Thr	Leu	Ile	Leu	Leu	Gly	Ile	Leu	Val	Phe
245													250	255
Gly	Ile	Trp	Phe	Ala	Tyr	Ser	Arg	Gly	His	Phe	Asp	Arg	Thr	Lys
260													265	270
Lys	Gly	Thr	Ser	Ser	Lys	Lys	Val	Ile	Tyr	Ser	Gln	Pro	Ser	Ala
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Gly	Ser	Asp	Pro	Val	Thr	Ile	Phe	Leu	Arg	Asp	Ser	Ser	Gly	Asp
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His	Ile	Gln	Gln	Ala	Lys	Tyr	Gln	Gly	Arg	Leu	His	Val	Ser	His
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 Tyr Gly Phe Thr Val Pro Gln Gly Met Arg Ile Ser Leu Gln Cys  
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 Gln Ala Arg Gly Ser Pro Pro Ile Ser Tyr Ile Trp Tyr Lys Gln  
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 Gln Thr Asn Asn Gln Glu Pro Ile Lys Val Ala Thr Leu Ser Thr  
 185 190 195  
 Leu Leu Phe Lys Pro Ala Val Ile Ala Asp Ser Gly Ser Tyr Phe  
 200 205 210  
 Cys Thr Ala Lys Gly Gln Val Gly Ser Glu Gln His Ser Asp Ile  
 215 220 225  
 Val Lys Phe Val Val Lys Asp Ser Ser Lys Leu Leu Lys Thr Lys  
 230 235 240  
 Thr Glu Ala Pro Thr Thr Met Thr Tyr Pro Leu Lys Ala Thr Ser  
 245 250 255  
 Thr Val Lys Gln Ser Trp Asp Trp Thr Thr Asp Met Asp Gly Tyr  
 260 265 270  
 Leu Gly Glu Thr Ser Ala Gly Pro Gly Lys Ser Leu Pro Val Phe  
 275 280 285  
 Ala Ile Ile Leu Ile Ile Ser Leu Cys Cys Met Val Val Phe Thr  
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 Val Tyr Glu Ala Ala Arg  
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 gtcaagggtca agctcatcgt gcttgcct ccatccaagc ctacagttaa 150  
 catccccctcc tctgccacca ttgggaaccg ggcaagtgcgtg acatgctcag 200

aacaagatgg ttccccacct tctgaataca cctggttcaa agatggata 250  
gtgatgccta cgaatcccaa aagcacccgt gccttcagca actcttccta 300  
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gcgcaagctc gagagggaaac tgggtgcct cttcatattg ggcgcctgt 150  
tgtgctccct ggcattgggc agtgttacag ttgcactctt ctgaacctga 200  
agtcaagaatt cctgagaata atcctgtgaa gttgtcctgt gcctactcgg 250  
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taacatcccc tcctctgcca ccattggaa ccgggcagtg ctgacatgt 550  
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atagtgtatgc ctacgaatcc caaaagcacc cgtgccttca gcaactcttc 650  
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taagattact gagctccgtg tccagaaact ctctgtctcc aagcccacag 200  
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Leu Arg Ala Ser Gln Gly Lys Ser Val Thr Leu Pro Cys Thr Tyr  
35 40 45

His Thr Ser Thr Ser Ser Arg Glu Gly Leu Ile Gln Trp Asp Lys  
50 55 60

Leu Leu Leu Thr His Thr Glu Arg Val Val Ile Trp Pro Phe Ser  
65 70 75

Asn Lys Asn Tyr Ile His Gly Glu Leu Tyr Lys Asn Arg Val Ser  
80 85 90

Ile Ser Asn Asn Ala Glu Gln Ser Asp Ala Ser Ile Thr Ile Asp  
95 100 105

Gln Leu Thr Met Ala Asp Asn Gly Thr Tyr Glu Cys Ser Val Ser  
110 115 120

Leu Met Ser Asp Leu Glu Gly Asn Thr Lys Ser Arg Val Arg Leu  
125 130 135

Leu Val Leu Val Pro Pro Ser Lys Pro Glu Cys Gly Ile Glu Gly  
140 145 150

Glu Thr Ile Ile Gly Asn Asn Ile Gln Leu Thr Cys Gln Ser Lys  
155 160 165

Glu Gly Ser Pro Thr Pro Gln Tyr Ser Trp Lys Arg Tyr Asn Ile  
170 175 180

Leu Asn Gln Glu Gln Pro Leu Ala Gln Pro Ala Ser Gly Gln Pro  
185 190 195

Val Ser Leu Lys Asn Ile Ser Thr Asp Thr Ser Gly Tyr Tyr Ile  
200 205 210

Cys Thr Ser Ser Asn Glu Glu Gly Thr Gln Phe Cys Asn Ile Thr  
215 220 225

Val Ala Val Arg Ser Pro Ser Met Asn Val Ala Leu Tyr Val Gly  
230 235 240

Ile Ala Val Gly Val Val Ala Ala Leu Ile Ile Ile Gly Ile Ile  
245 250 255

Ile Tyr Cys Cys Cys Cys Arg Gly Lys Asp Asp Asn Thr Glu Asp  
260 265 270

Lys Glu Asp Ala Arg Pro Asn Arg Glu Ala Tyr Glu Glu Pro Pro  
275 280 285

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Tyr Arg Gln Glu Glu Gln Arg Ser Thr Gly Arg Glu Ser Pro Asp  
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His Leu Asp Gln

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<212> DNA  
<213> Homo sapiens  
  
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tggtgctcaa taaatatcta atcataacag c 2181

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<213> Homo sapiens

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aagactgttt cctccagatt agagtggaaag aaactgggtc ggagtgtctc 300  
ctttgtctac tatcaacaga ctcttcaagg tgattttaaa aatcgagctg 350  
agatgataga tttcaatatac cggatcaaaa atgtgacaag aagtgtatgc 400  
gggaaatatac gttgtgaagt tagtgcccca tctgagcaag gccaaaacct 450  
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catgtgaagt acccttcttct gctctgagtg gaactgtggt agagctacga 550  
tgtcaagaca aagaaggaa tccagctcct gaatacacat ggtttaagga 600

tggcatccgt ttgctagaaa atcccagact tggctcccaa agcaccaaca 650  
gctcatacac aatgaataca aaaactggaa ctctgcaatt taatactgtt 700  
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ggccttggtg tatgctatgc tcagaggaaa ggctactttt caaaagaaaac 900  
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atgtgcagt gctcacgcct gtaatcccag cactttggaa ggccgcggcg 1000  
ggcggatcac gaggtcagga gttctagacc agtctggcca atatggtcaa 1050  
accccatctc tactaaaata caaaaattag ctggcatgg tggcatgtgc 1100  
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cgaggttgc agtgcagtc gatcacgcca ctgcagtcgc gcctggtaa 1200  
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<212> PRT  
<213> Homo sapiens

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35 40 45  
Ala Ile Leu Ala Cys Lys Thr Pro Lys Lys Thr Val Ser Ser Arg  
50 55 60  
Leu Glu Trp Lys Lys Leu Gly Arg Ser Val Ser Phe Val Tyr Tyr  
65 70 75  
Gln Gln Thr Leu Gln Gly Asp Phe Lys Asn Arg Ala Glu Met Ile  
80 85 90  
Asp Phe Asn Ile Arg Ile Lys Asn Val Thr Arg Ser Asp Ala Gly  
95 100 105  
Lys Tyr Arg Cys Glu Val Ser Ala Pro Ser Glu Gln Gly Gln Asn  
110 115 120  
Leu Glu Glu Asp Thr Val Thr Leu Glu Val Leu Val Ala Pro Ala  
125 130 135  
Val Pro Ser Cys Glu Val Pro Ser Ser Ala Leu Ser Gly Thr Val  
140 145 150

Val Glu Leu Arg Cys Gln Asp Lys Glu Gly Asn Pro Ala Pro Glu  
 155 160 165  
 Tyr Thr Trp Phe Lys Asp Gly Ile Arg Leu Leu Glu Asn Pro Arg  
 170 175 180  
 Leu Gly Ser Gln Ser Thr Asn Ser Ser Tyr Thr Met Asn Thr Lys  
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 200 205 210  
 Glu Tyr Ser Cys Glu Ala Arg Asn Ser Val Gly Tyr Arg Arg Cys  
 215 220 225  
 Pro Gly Lys Arg Met Gln Val Asp Asp Leu Asn Ile Ser Gly Ile  
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 Ile Ala Ala Val Val Val Ala Leu Val Ile Ser Val Cys Gly  
 245 250 255  
 Leu Gly Val Cys Tyr Ala Gln Arg Lys Gly Tyr Phe Ser Lys Glu  
 260 265 270  
 Thr Ser Phe Gln Lys Ser Asn Ser Ser Lys Ala Thr Thr Met  
 275 280 285  
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 <211> 300  
 <212> PRT  
 <213> Mus musculus

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 35 40 45  
 Lys Leu Thr Cys Thr Tyr Ser Gly Phe Ser Ser Pro Arg Val Glu  
 50 55 60  
 Trp Lys Phe Val Gln Gly Ser Thr Thr Ala Leu Val Cys Tyr Asn  
 65 70 75  
 Ser Gln Ile Thr Ala Pro Tyr Ala Asp Arg Val Thr Phe Ser Ser  
 80 85 90  
 Ser Gly Ile Thr Phe Ser Ser Val Thr Arg Lys Asp Asn Gly Glu  
 95 100 105  
 Tyr Thr Cys Met Val Ser Glu Glu Gly Gln Asn Tyr Gly Glu  
 110 115 120

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Thr	Cys	Ser	Glu	His	Asp	Gly	Ser	Pro	Pro	Ser	Glu	Tyr	Ser	Trp
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Phe	Lys	Asp	Gly	Ile	Ser	Met	Leu	Thr	Ala	Asp	Ala	Lys	Lys	Thr
170								175					180	
Arg	Ala	Phe	Met	Asn	Ser	Ser	Phe	Thr	Ile	Asp	Pro	Lys	Ser	Gly
185								190					195	
Asp	Leu	Ile	Phe	Asp	Pro	Val	Thr	Ala	Phe	Asp	Ser	Gly	Glu	Tyr
200								205					210	
Tyr	Cys	Gln	Ala	Gln	Asn	Gly	Tyr	Gly	Thr	Ala	Met	Arg	Ser	Glu
215								220					225	
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230								235					240	
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245								250					255	
Gly	Val	Trp	Phe	Ala	Tyr	Ser	Arg	Gly	Tyr	Phe	Glu	Thr	Thr	Lys
260								265					270	
Lys	Gly	Thr	Ala	Pro	Gly	Lys	Lys	Val	Ile	Tyr	Ser	Gln	Pro	Ser
275								280					285	
Thr	Arg	Ser	Glu	Gly	Glu	Phe	Lys	Gln	Thr	Ser	Ser	Phe	Leu	Val
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 gtgtaacagg accttggaaa gggatgtga atcttccctg cacctatgac 250  
 cccctgcaag gctacaccca agtcttggtg aagtggctgg tacaacgtgg 300  
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<213> Homo sapiens

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Gly	Phe	Ser	Ser	Pro	Arg	Val	Glu	Trp	Lys	Phe	Asp	Gln	Gly	Asp
					35				40					45
Thr	Thr	Arg	Leu	Val	Cys	Tyr	Asn	Asn	Lys	Ile	Thr	Ala	Ser	Tyr
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Glu	Asp	Arg	Val	Thr	Phe	Leu	Pro	Thr	Gly	Ile	Thr	Phe	Lys	Ser
					65				70					75
Val	Thr	Arg	Glu	Asp	Thr	Gly	Thr	Tyr	Thr	Cys	Met	Val	Ser	Glu
					80				85					90
Glu	Gly	Gly	Asn	Ser	Tyr	Gly	Glu	Val	Lys	Val	Lys	Leu	Ile	Val
					95				100					105
Leu	Val	Pro	Pro	Ser	Lys	Pro	Thr	Val	Asn	Ile	Pro	Ser	Ser	Ala
					110				115					120
Thr	Ile	Gly	Asn	Arg	Ala	Val	Leu	Thr	Cys	Ser	Glu	Gln	Asp	Gly
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Ser	Pro	Pro	Ser	Glu	Tyr	Thr	Trp	Phe	Lys	Asp	Gly	Ile	Val	Met
					140				145					150
Pro	Thr	Asn	Pro	Lys	Ser	Thr	Arg	Ala	Phe	Ser	Asn	Ser	Ser	Tyr
					155				160					165
Val	Leu	Asn	Pro	Thr	Thr	Gly	Glu	Leu	Val	Phe	Asp	Pro	Leu	Ser
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Ala	Ser	Asp	Thr	Gly	Glu	Tyr	Ser	Cys	Glu	Ala	Arg	Asn	Gly	Tyr
					185				190					195
Gly	Thr	Pro	Met	Thr	Ser	Asn	Ala	Val	Arg	Met	Glu	Ala	Val	Glu
					200				205					210
Arg	Asn	Val	Gly	Val	Ile	Val	Ala	Ala	Val	Leu	Val	Thr	Leu	Ile
					215				220					225
Leu	Leu	Gly	Ile	Leu	Val	Phe	Gly	Ile	Trp	Phe	Ala	Tyr	Ser	Arg
					230				235					240
Gly	His	Phe	Asp	Arg	Thr	Lys	Lys	Gly	Thr	Ser	Ser	Lys	Lys	Val
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Ile	Tyr	Ser	Gln	Pro										
					260									

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<212> PRT

<213> Homo sapiens

<400> 24

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	20							25					30	
Tyr	His	Thr	Ser	Thr	Ser	Ser	Arg	Glu	Gly	Leu	Ile	Gln	Trp	Asp
	35							40					45	
Lys	Leu	Leu	Leu	Thr	His	Thr	Glu	Arg	Val	Val	Ile	Trp	Pro	Phe
	50							55					60	
Ser	Asn	Lys	Asn	Tyr	Ile	His	Gly	Glu	Leu	Tyr	Lys	Asn	Arg	Val
	65							70					75	
Ser	Ile	Ser	Asn	Asn	Ala	Glu	Gln	Ser	Asp	Ala	Ser	Ile	Thr	Ile
	80							85					90	
Asp	Gln	Leu	Thr	Met	Ala	Asp	Asn	Gly	Thr	Tyr	Glu	Cys	Ser	Val
	95								100				105	
Ser	Leu	Met	Ser	Asp	Leu	Glu	Gly	Asn	Thr	Lys	Ser	Arg	Val	Arg
	110								115				120	
Leu	Leu	Val	Leu	Val	Pro	Pro	Ser	Lys	Pro	Glu	Cys	Gly	Ile	Glu
	125								130				135	
Gly	Glu	Thr	Ile	Ile	Gly	Asn	Asn	Ile	Gln	Leu	Thr	Cys	Gln	Ser
	140								145				150	
Lys	Glu	Gly	Ser	Pro	Thr	Pro	Gln	Tyr	Ser	Trp	Lys	Arg	Tyr	Asn
	155								160				165	
Ile	Leu	Asn	Gln	Glu	Gln	Pro	Leu	Ala	Gln	Pro	Ala	Ser	Gly	Gln
	170								175				180	
Pro	Val	Ser	Leu	Lys	Asn	Ile	Ser	Thr	Asp	Thr	Ser	Gly	Tyr	Tyr
	185								190				195	
Ile	Cys	Thr	Ser	Ser	Asn	Glu	Gly	Thr	Gln	Phe	Cys	Asn	Ile	
	200								205				210	
Thr	Val	Ala	Val	Arg	Ser	Pro	Ser	Met	Asn	Val	Ala	Leu	Tyr	Val
	215								220				225	
Gly	Ile	Ala	Val	Gly	Val	Val	Ala	Ala	Leu	Ile	Ile	Ile	Gly	Ile
	230								235				240	
Ile	Ile	Tyr	Cys	Cys	Cys	Cys	Arg	Gly	Lys	Asp	Asp	Asn	Thr	Glu
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Ala Tyr Ser Gly Phe Ser Ser Pro Arg Val Glu Trp Lys Phe Asp  
 35 40 45

Gln Gly Asp Thr Thr Arg Leu Val Cys Tyr Asn Asn Lys Ile Thr  
 50 55 60

Ala Ser Tyr Glu Asp Arg Val Thr Phe Leu Pro Thr Gly Ile Thr  
 65 70 75

Phe Lys Ser Val Thr Arg Glu Asp Thr Gly Thr Tyr Thr Cys Met  
 80 85 90

Val Ser Glu Glu Gly Gly Asn Ser Tyr Gly Glu Val Lys Val Lys  
 95 100 105

Leu Ile Val Leu Val Pro Pro Ser Lys Pro Thr Val Asn Ile Pro  
 110 115 120

Ser Ser Ala Thr Ile Gly Asn Arg Ala Val Leu Thr Cys Ser Glu  
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Gln Asp Gly Ser Pro Pro Ser Glu Tyr Thr Trp Phe Lys Asp Gly  
 140 145 150

Ile Val Met Pro Thr Asn Pro Lys Ser Thr Arg Ala Phe Ser Asn  
 155 160 165

Ser Ser Tyr Val Leu Asn Pro Thr Thr Gly Glu Leu Val Phe Asp  
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Pro Leu Ser Ala Ser Asp Thr Gly Glu Tyr Ser Cys Glu Ala Arg  
 185 190 195

Asn Gly Tyr Gly Thr Pro Met Thr Ser Asn Ala Val Arg Met Glu  
 200 205 210

Ala Val Glu Arg Asn Val Gly Val Ile Val Ala Ala Val Leu Val  
 215 220 225

Thr Leu Ile Leu Leu Gly Ile Leu Val Phe Gly Ile Trp Phe Ala  
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Lys Lys Val Ile Tyr Ser Gln Pro  
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Pro Cys Thr Tyr His Thr Ser Thr Ser Ser Arg Glu Gly Leu Ile  
 35 40 45  
 Gln Trp Asp Lys Leu Leu Leu Thr His Thr Glu Arg Val Val Ile  
 50 55 60  
 Trp Pro Phe Ser Asn Lys Asn Tyr Ile His Gly Glu Leu Tyr Lys  
 65 70 75  
 Asn Arg Val Ser Ile Ser Asn Asn Ala Glu Gln Ser Asp Ala Ser  
 80 85 90  
 Ile Thr Ile Asp Gln Leu Thr Met Ala Asp Asn Gly Thr Tyr Glu  
 95 100 105  
 Cys Ser Val Ser Leu Met Ser Asp Leu Glu Gly Asn Thr Lys Ser  
 110 115 120  
 Arg Val Arg Leu Leu Val Leu Val Pro Pro Ser Lys Pro Glu Cys  
 125 130 135  
 Gly Ile Glu Gly Glu Thr Ile Ile Gly Asn Asn Ile Gln Leu Thr  
 140 145 150  
 Cys Gln Ser Lys Glu Gly Ser Pro Thr Pro Gln Tyr Ser Trp Lys  
 155 160 165  
 Arg Tyr Asn Ile Leu Asn Gln Glu Gln Pro Leu Ala Gln Pro Ala  
 170 175 180  
 Ser Gly Gln Pro Val Ser Leu Lys Asn Ile Ser Thr Asp Thr Ser  
 185 190 195  
 Gly Tyr Tyr Ile Cys Thr Ser Ser Asn Glu Glu Gly Thr Gln Phe  
 200 205 210  
 Cys Asn Ile Thr Val Ala Val Arg Ser Pro Ser Met Asn Val Ala  
 215 220 225  
 Leu Tyr Val Gly Ile Ala Val Gly Val Val Ala Ala Leu Ile Ile  
 230 235 240  
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tggaactgtg gtagagctac gatgtcaaga caaagaaggg aatccagctc 200  
ctgaatacac atggtttaag gatggcatcc gtttgctaga aaatcccaga 250  
cttggctccc aaagcaccaa cagctcatac acaatgaata caaaaactgg 300  
aactctgcaa tttaataactg tttccaaact ggacactgga gaatattcct 350  
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